^free from dirt and grease, is now to be immersed in is detached. Joseph Hough, of Buckingham, Pa, is it and allowed to stand for about three hours, when it turns perfectly black. It is then lifted out and washed well in soft water and dried in sawdust. After this it is coated with a paste of black lead used for iron stoves, and when dry it is polished with a brush. After this it may receive a thin coat of lacvarnish.

RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patentwere issued from the United States Patent Office last week. The claim may be found in the official list.

Machine for Printing Designs on Textile Fabrics.-This invention consists in imparting to the material to bo printed a lateral vibrating motion, during the operation of printing, in such a manner that the printed surface assumes a watered appearance of different patterns according to the rapidity of the vibrating motion when compared with the rotary motion of the printing and pressing rollers ; it consists further in the combination with the printing and pressing rollers of a vibrating roller, the lateral motion of which can be regulated by means of cranks, pattern or eccentric wheels or any other suitable device, in such a manner that the vibratory motion of the cloth or other material passing over said roller to and between the printing rollers can be regulated according to the desired pattern ; it consists, finally, in the arrangement of two hinged angular levers in combination with the let-off roller, from which the fabric to be printed unwinds, and with a weighted roller, in such a manner that the pressure exerted by the weighted roller on the gudgeons of the let-off roller regulates itself according to the varying diameter of said roller and consequent increase or decrease in the power required for turning the same, and that by these means a perfectly uniform tension of the fabric, during the operation of printing, is effected. Edward Leitenberger, of Reichstadt, Kingdom of Bohemia, is the inventor of this device, but further information about it may be had by addressing the assignee, A. G. Scheller, 370 Bowery, New York.

Coloring Photographic Pictures .- The object of this invention is to enable photographic pictures on albumenized paper to be successfully colored with dry colors. Such pictures, owing to the albumenized paper not being capable of receiving dry colors without some preparation, and no perfectly suitable preparation having been heretofore known, are commonly colored with water colors, and this can only be done successfully by skillful artists so as to bear the close inspection to which such pictures are subject. This invention consists in the use of collodion as a medium for receiving dry colors on such pictures. James F. Bodtker, of Madison, Wis., is the inventor of this improvement.

Direct-acting Engine.-The object of this invention is to arrange the main valve of a steam cylinder in such a manner that the steam is changed and a full head of steam admitted as soon as the piston arrives at the end of its stroke, and that the engine will pass the dead points without the aid of a balance wheel. The invention consists in the employment, in combination with the ordinary slide valve. of a secondary steam cylinder provided with a slide valve in such a way that by the action of said secondary cylinder the main valve is suddenly thrown from one end of the steam chest to the other, before the piston of the main cylinder arrives at the end of its stroke, and that by these means the steam is changed and a full head of steam admitted to reverse the motion of the piston without the aid of a balance wheel. The motion of the slide valve of the se condary cylinder is governed by the action of cams and by the motion of the secondary cylinder. Louis Winterbauer, of New York City, is the inventor of this engine.

Railroad Car Brake.-The object of this invention is to obtain a car brake by which all the brakes of a series of cars comprising a train may be operated simultaneously by the engineer, and the brakes made to act with an equal or uniform pressure on all the wheels of the several cars; the invention, at the same time, admitting of a brakesman applying the brakes at either end of a train after the locomotive

the inventor of this improvement.

Revolving Fire-arm .- The principal object of this invention is to provide for the loading of a revolving fire-arm with metallic cartridges carrying their own priming in hollow flanges projecting circumferentially around their rear ends without having the revolving cylinder of the arm open at its rear end; and hence it consists in the construction of a revolving fire-arm with a number of independent movable chambers fitted to slide longitudinally within openings in the sides of the revolving cylinder : it also consists in the employment, in combination with such a system of movable chambers, of a stationary piston secured to the frame of the arm for the purpose of expelling the discharged cartridge shells from the said chambers by a forward movement of the chambers from the cylinder. F. P. Slocum, of Brooklvn. N. Y., is the inventor of this fire-arm.

SECONDARY GOVERNMENT FEES ON PATENTS.

We would call the attention of patentees to the annexed amendment of the Patent Laws, enacted March 3, 1863 :--

Every patent shall be dated as of a day not later than six months after the time at which it was passed and al-lowed, and notice thereof sent to the applicant or his agent; and if the final fee for such patent be not paid within the said six months, the patent shall be withheld, and the in-vention therein described shall become public property as against the applicant therefor: Provided, that in all cases where patents have been allowed previous to the passage of this act, the said six months shall be reckoned from the date of such passage.

From the above it will be seen that it is incum bent on every patentee to pay the second Government fee within six months after a patent is allowed, or else it will become public property and the inventor will be deprived of the patent.

THE BIBLIOTHEGA SACRA. Published by Warren F. Draper, Andover, Mass. This theological review for April contains nine essays on different

subjects, viz: "The Roman Empire and Christianity;" "Buckle's History of Civilization;" "The Old School in New England Theology," &c. The Bibliotheca Sacra is very cosmopelitan in an evangel not dry "marrowless treatises," like those of the old schoolmen, nor are they flippant, like those of too many modern writers on such topics, but they are usually brilliant, acute and learned.

Binding the "Scientific American."

It is important that all works of refference should be well boy The SOLENTIFIC AMERICAN being the only publication in the country which records the doings of the United States Patent Office, it is pre-served by a large class of its patrons, lawyers and others, for reference Some complaints have been made that our past mode of binding in cloth is not serviceable, and a wish has been expressed that we would adopt the style of binding used on the old series, *i. e.*, heavy be sides, covered with marble paper and morocco backs and corners. board

Believing that the latter style of binding will better please a large portion of our readers, we shall commence on the expiration of this present volume to bind the sheets sent to us for the purpose in heavy oard sides, covered with marble paper and leather backs and corners The price of binding in the above style will be 75 cents. We shall be unable hereafter to furnish covers to the trade, but will be happy to receive orders for binding at the publication office, 37 Park Row, New York.

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Modelsare required to accompany applications for Patents under the new law, the same as formerly, except on design patents when twogood drawings are all that is required to accompany the on, specification and oath, except the Governm

NEW PAMPHLETS IN GERMAN .- We have just issued a re 4075, contain vised edition of our pamphlet of Instructions to In a digest of the fees required under the new Patent Law, &c., printe he German ianguage, which persons can have grait upon appli-nat this office. Address MUNN & CO., in the G MUNN & CO., No. 87 Park-row, New York



ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WEEK ENDING APRIL 14, 1863.

Reported Officially for the Scientific American.

*** Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

38,130.—Metallic Hoop.—J. L. Alberger, Buffalo, N. Y.: I claima hoop for barrels, casks, tierces or other vessels made of staves, having one or more corrugations or creases in it, for the purpose herein described.

purpose nerein described.
38,140.—Manufacture of Steel.—Charles Attwood, Ton law Iron-works, Durham county, England. Patent-ed in England May 15, 1862:
I claim the production or manufacture of steel and iron of a steely quality, substantially as bereinbefore described and set forth.

38,141.—Screw.—J. A. Ayres, Hartford, Conn. : I claim a screw, A, with a dovetailed slot, a, as and for the pur-I claim a scr pose set forth.

This invention consists in the arrangement of a dovetalled slotin $[1 \text{ In s investion consists in the arrangement of a dottentiate solution$ the head of a screw, in such a manner that the edges of said slot af-ford a good and firm hold to the screwdriver, and that said slot is notliable to wear out and cause the screwdriver to slip

38,142.—Provision-cooler.—J. W. Bartlett, New York City: 1 claim a cooler or refrigerator consisting of the provision cham-ber, JJ, air and water chamber, SS, ice box, H, hcliow tubes, OO, when arranged substantially as and for the purposes specified.

38.143 .- Station and Street Indicator for Railroad Cars.

38,143.—Station and Street Indicator for Railroad Cars. Alexander Bertier, Hannibal, Mo.: I claim the endless band with a star or pointed wheel attached to one of its rollers or the shaft thereof, and a projection at the side of the track or road to actuate said wheel, in combination with a bell, combined spring-hammer and stop, and the plus or rods, b, the latter being attached to the roller aforesaid, and all arranged to operate substantially as and for the purpose herein set forth. I turther claim the weight I, applied to one of the rollers of the band-moving mechanism, for the purpose specified. [This invention consists in the employment or use of an endless

[This invention consists in the employment or use of an e pand having the names of the stations or streets marked upon it and placed within a suitable case inside the car, in combination with a bell, a combined bell-hammer and stop, and a band moving mechanism, whereby the several stations or streets will be indicated, as they are reacted, to the passengers in the car, and an alarm sounded so as to direct the attention of the passengers to the indicator.]

38,144.-Coloring Photographs.-J. F. Bodtker, Madison,

Wis. : laim the use of collodion as a medium for receiving dry colors on or a provide pictures on albumenized grounds, substantially as I clain photographic pic

38,145.—Churn Dasher.—A. C. Brown, Sycamore, Ill.: I claim the churn dash, constructed and operating substantially as and for the purposes set forth.

as and for the purposes set forth.
38,146.—Carbon Plate for Galvanic Batteries.—C. T. Chester, New York City:
I claim, in combination with a carbon element of a galvanic battery, a gold or platinum connection imbedded in the carbon during the process of manufacture of the carbon element, substantially as described.

38,147.—Cork-drawer.—Chas. Chinnock, Brooklyn, N.Y.: I claim the combination of the ratchet cap, a, the losse snail-like cam or screw, b, and the corresponding cam or screw, c, with the independent worm and pillar, d, all operating together for the pur-pose set forth.

38,148.-Chuck for Lathes.-J. Christman and Wm. Gil-

36,140.—Childk for Lakings.—J. Christman and win. Glifillan, Syracuse, N. Y.: We claim a chuck, constructed, arranged and operated as de-scribed, that is to say, having the sliding pink or dogs. L. working in the radial dovetail grooves, in the outer casement wheel, in combi-nation with projections. O, working in the eccentric grooves in the face of the inner wheel or disk, J, whom waid wheel or disk, J, is operated by means of the tangential screw, H, the several parts be-ing constructed, arranged and operated in the maner described, for the purpose specified.

38.149

e purpose specified. 8,149.—Lamp.—G. F. J. Colburn, Newark, N. J.: I claim the reservoir, A, having the arms or projections, a and b, formed and combined with it, as to support and supply with oil ore than one burner, simultaneously, as specified. I claim the application of the cap between the burners for the ject specified.

38,150.—Lamp Chimney.—G. F. J. Colburn, Newark, N. J.: I claim the method of connecting a tube with a lamp or gas burber by means of a fixture made and attached as described, so that it may be combined with or removed from a giass globe or other transparent device protecting the flame, substantially in the manner and for the purpose specified.

38,151.-Mast for Navigable Vessels.-Cowper P. Coles, Southsea, England. Patented in England, April 10,

Southsea, England. Patented in England, April 10, 1862: claim the construction of masts for vessels of tubes of steel or , in the manner and for the purposes substantially as set forth

uerem. 38,152.—Evaporating Pan for Sugar Juices.—D. M. Cook, Mansfield, Ohio: I claim, first, The arrangement of a zig-zag steam coll, constructed substantially as described, within the ledges of an eraporator pan which allows the juice to flow continuously in an indirect course, ar rests the impurities and also keeps the juice comparatively cool ou side of the steam coll, substantially as and for the purposes d scribed.

ide of the stram con, score-cribed. Second, The combination of the steam coil metal bottom, par loas, wooden ends, and wooden bottom, in the maunerand fort purpose described. Third, The manner of suspending the coil.

-Cylinder Polisher.—George Cowing, Seneca 38.153

18,153.—Oylinuter I character Falls, N. Y.: I claim a cylinder polisher composed of the stem, B, springs, A L, and rubbers, B, constructed substantially as set rorth.

A, and rubbers, B, constructed substantially as set forth. 38,154.—Steam Radiators.—R. T. Crane, Chicago, Ill. : I claim, first, Constructing the base, A, of a steam radiator of two or more chambers, and connecting the said chambers by the vertical U-shaped pipes, B, when arranged and operating substantially as and for the purposes delineated and set forth.

Second, I claim the opening, C, between the compariments of the assort the steam radiator for the purposes herein described and set forth. Third, I claim the opening, c, or its equivalent, for the purpose shown and anecified herein.

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38,155. -Holding-frame for Corkscrews.-H. M. Creamer • Brooklyn, N. Y. :

Brooklyn, N. Y.: I claim acurkscrew bolder having the capacity, substantially as described, of being varied in width to suitdifferent-sized botties, sub-stantially as specified. Also a holder having the capacity, substantially as herein de-scribed, of being varied in length to suit various lengths of cork-screws, as set forth. Also the mode, substantially as specified, of holding the cork when withdrawn, while being freed from the corkscrew, consisting in the use of a scribes of points arranged and employed in combination with the bolder, substantially as described.

18,156.—Composition for lubricating Wool.—B. A. Earl, Philadelphia, Pa. : I claim the use of borax water for purposes of lubrication in the nanufacture of wool, as above specified. 38,156

manufacture of wool, as above specified. 38,157.—Pump.—E. Elliott, Petaluma, Cal.: I claim the forming of the induction and eduction tubes, A B, of a series of wooden pieces, a, bored longitudically and connected to-gether, substantially as shown, in combination with the pump cylin-der, D, attached to one of said pieces, a, and communicating with the tubes, A B, as shown and provided with the piston, F, all ar-ranged to operate as described, the above parts being used with or without the air vessel, C.

This invention relates to a new and improved force pump of that class which are placed at the bottoms of wells. The object of the invention is to obtain a simple and efficient pump of the class specified, and one which will be capable of being advantageously applie to a windmill to be worked or operated thereby.]

38,158.—Device for Operating Churns.—Geo. C. Ferris, Sharon, Wis.: I claim the combination and arrangement of the dasher handle, e, the lever, E, the wheel, B, the hole, o, and the apport and guide, D, constructed and operating substantially as and for the purposes set forth and described. 38,159.-Railroad Chair.-B. F. Gossin, Cincinnati, Ohio

38,159.—Railroad Chair.—B. F. Gossin, Cincinnati, Ohio : I claim, first, The adaptation of the base plate, C, side plates, B, bolts, b' b', and rails, A A, for use together in isuch manner that the base plate, C, is supported and confined against latteral, longitudinal and verifical movement. In the manner substantially as described. Becond, The combination of the side plates, B b b, through bolts, b' b' c, and plate, C, with the rails, A A, in the manner substan-tially as described. Third, The side plates, B b b, constructed as described, for the pur-pose set forth. Fourth, The arrangement at the ends of the plate, C, of the key bolts, b' b', in the manner and for the purpose described. Fith, Preventing lateral play of the base plate, C, by means of the jaws, b which underhang the plate, C, in the manner described.

38,160.—Paper Shirt Collars.—S. S. Gray, Boston, Mags.: I claim as a new article of manufacture, a paper shirt collar struck up or pressed from a fixt piece into any desirable form, substantially as described and for the objects specified.

as described and for the conjects specines. 38,161.—Gang Plow. Jacob Haege, Shiloh, Ill.: I claim, fret. The combination and arrangement of the pole, G, axle, E, verticalrod, H', and draught rod, J, substantially as shown, to admit of the lateral adjustment of the draught relatively with a gagg plow, as set forth. sang plow as set for a distances of the unsugni relatively with a gang plow as set for a set for a set of the socket, b, fitted on the arie, E, and as ranged in such a manner as to receive the pole, G, and having a server, e, passing vertically through it and through the oblong solds, fg, in the axie and pole, whereby the pole, G, is firmly secured to the sail, and the such as the sail of the sail o

[This invention consists in constructing and arranging certain part pertaining to the gang plow, in such a manner that the draught may he regulated so as to give the plows more or less land, as it is techni termed ; that is to say, a tendency for the plows to w move toward or from the unplowed surface, as may be required, and also to admit of the plows being adjusted nearer together or further apart, as may be desired, as well as to admit of the plows being readi-ly raised or lowered at the will of the driver.]

ly raised or lowered at the will of the diversity 38,162.—Lamp.—H. W. Hayden, Waterb ry, Conn.: I claim the circular wick and tube, c, in combination with the de-factor, h, slotted as specified, and with the glass chimney, R, having a draught space between the base of said chimney and the deflector, for the purposes and as specified. I also claim the perforated sir-distributer, e, in combination with the said circular wick, c, slotted deflector, h, and glass chimney, g, for the purpose of regulating the action of the sir, as set forth.

38,163 .- Reflector for Lamps .- H. W. Hayden, Water-

bury, Conn. : I claim a reflector or shade surrounding the liamp chimney in com-bibation with the spring ring and binges, as set forth, so as to allow of the inclination of said shade or reflector, as specified.

38,164.—Tagged Braid for Shoe-Strings.—James? Hill, Providence, R. I.: I claim the described improved manufacture of double-tagged braid, capuble of being made into tagged shoe-strings by severing each double-tag blank at its middle, as specified.

38,165.—Friction Wheel for driving Machinery.—Jonas Hinkley, Norwalk, Ohio: I claim the wheel A, baving a grooved periphery, a, in combina-tion with the wheel B, formed of a fixed part, b, and a sliding part b', provided respectively with the springs, FF, and screws, G, and arranged to operate in connection with the wheel, A, as and for the purpose herein set forth.

This invention consists in the employment of a grooved driving wheel in connection with an expanding wheel arranged in such a manner that it will press against the sides of the groove in the driving wheel, and create sufficient friction to cause the rotation of the panding wheel, the latter being so constructed as to be capable of be-ing adjusted to regulate the pressure and friction be may be quired.]

38,166 .- Railroad Car Brake .- Joseph Hough, Bucking

38,166.—Railroad Car Brake.—Joseph Hough, Buckingham, Pa.i I claim, first, The manner of winding up the chain, X. to operate the bars, U. to wit, by having the shaft, Y. fitted in swinging pend-ants, Z. attached to the locomotive and provided with wheels, A', which are brought in contact with the treads of the wheels, B, or with the stle thereof, by any suitable mechanism under the hand ef the engineer or an assistant. Becoud. The bars, U. provided with a spiral spring, V, when ar-sanged in connection with the chains, W, and buffer-bead bars, P, to offrate substantially as and for the purpose herein set forth. Third, The sliding bar, M, in connection with the arm. L, shaft, K, provided with the arms, J, and thechains, I, connected to thearmatially as and for the purpose herein set forth. Fourth the ast, and the chains, W, and subfar-bead bars, P, to operate substantially as and the that methanism, arranged substan-tially as and for the purpose herein set forth. Fourth the arrangement of the chains, W, Mixed pulleys, B, and the pulleys, R, on the buffer-head bars, P, and the pioted bars, Q, to operate as shown, and keeping the chains, W, at a proper state of ions during the movement of the bars, P, as a specified. Fifth, The combination of the buffer-head bars, P, bars, U, chains, W w pulleys, R, S, slide bars, M, arco, L, shaft, K, with arms, J J, statached chains, I I, and rods, H' H', the later being connected with the brake mechanism and all arranged to operate as and for the same purpose herein set forth.

S8,167.— Apparatus for stirring and mixing Soaps, Colors, &c.— Henry Hungerford, New York City. Ante-dated March 7, 1863 :
I claim the form and construction of the vessel, A, for mixing soaps, colors and substances made up of different ingredients, sub-standially as and for the purposes set forth.
I also claim the arrangement, substantially as described, of the

arms, C O', &c., on the shaft, B, or their equivalent, so as to give a litting or upward, and at the same time a lateral motion to the arti-cle being mixed, substantially as and for the purposes set forth. I also claim the combination of the shaft, B, with its arms, C, or their equivalent, with the mixing vessel, A, or with a mixing vessel of other shape, for the purposes set forth. I also claim the application of the raive, D, in combination with a mixing kettle, A, substantially as and for the purposes set forth.

38,168.—Device for inserting the Gores of Shoes.—J. M. Hunter, New York City: I claim affixing the elastic gore by means of a clamp of metal, or equivalent device, whereby the said gore may be taken out and re-placed, substantially as set forth.

Mccu, Successfully as sectors. (8, 169.—Hog-cholera Medicine.—Franklin La Rew, Ham-liton, Ohio: I claim the combined use of the above-named ingredients, when repared and used in the manner and for the purpose specified. 38.169

prepared and used in the manner and for the purpose specified. 38,170.—Lamp.—C. B. Lasher, New York ()ity: First. I claim the wick case, g, extending from the wick tube and gradually supplied with oil or fluid from the reservoir through a small bole, 2, or its equivalent, as set forth and for the purposes specified: Becond, I claim the cap, d, attached directly to the surface of the reservoir itself in combination with the vent, 1, for the purposes set forth. Third, I claim the sorew rod, K, and hole, S, in combination with the wick case, g, for regulati g the supply of oil to said case, as set forth.

forth.

38,171.—Cultivator.—Alfred Leigh, Clinton Station, N. J.: I claim the arrangement of the frame, A, with wheels, B B', ad-justing levers, C. furrowing shares, E, hinged cultivator teeth, F, and swivel bar, G, with marker, H, all constructed and operating in the manner and for the purpose herein shown and described.

The invention consists in the strangement of a frame with four wheels and a draft pole sufficiently elevated to pass over the growing plants, the hind wheels being on the ends of bent beams, so that by means of said levers the whole can be moved up and down, and thereby the frame raised or lowered at pleasure for the purpose o regulating the depth of the furrows or throwing the plow-shares out of the ground when desired ; the furrowing shares being secured to the rear ends of the longitudinal timbers or beams of the frame and

the cultivating shares being hinged to a crossbar and arranged so that they can be turned up when not used and turned down they are to be brought in action.]

38,172.—Rudder.—Henry Lumley, Chancery Lane, Lon-don, England. Patented in England April 19, 1862 : I claim the attachment of the tail, B, to the stern post, C, by means of chains, DI D2, or equivalent fastenings, which pass obliquely through the body, A: the several parts being constructed and operat-ing substantially in the manner and for the purpose herein shown and described.

and described. 38,173.—Skate.—Charles H. Marvin, New York City : I claim having the heel part of the skate provided with a rot screw, the point and thread of which project above the surface of skate footpiece and enter a nut in the boot-beel, while the heir said screw is placed below the footpiece and project beyonn sides of the runner, as herein shown and described; so that by in ing the head of said screw, the skate may be quickly fastened temoved from the foot, all as set forth. d th This invention relates to an improved mode of attaching the back

part of the skate to the heel of the boot or shoe, whereby a very attachment of the aforesaid parts is obtained, and by a means which will admit of the parts being attached and detached with the greatest facility.]

Reinford 138,174.—Stove.—James Morrison, Jr., Troy, N. Y.: I claim supplying the oven, f, with a continued current of hot air by means of the cold air chamber, u, outside of the front plate, y, with openings, o, in the bottom thereof, and the hot air chamber, e, between the said cold air chamber and the fire chamber, a substan-tially as herein described and set forth. I also claim the downward projection, s, in combination with the bottom oven plate, w, substantially as and for the purpose herein de-scribed and set forth. I also claim the combination of the hollow walls or tubes, m m, and the vertical hollow walls or tubes, z with the oven, f, substan-tially as and for the purpose herein described and set forth.

tially as and for the purpose herein described and set forth.
38,175.—Post-office Stamp.—Marcus P. Norton, Troy, N. Y.:
I claim, first, The canceling device, C, with wood, cork, or rubber to cancel the postage stamps with indelible ink substantially sherein described and set forth.
Second, I also claim the canceling device, C, with wood, cork, or similar material forming the type or blotter, G, therein, in combination with the cross piece, B, and with the cost.marking device, substantially as herein described and set forth.

Substantially as nervin described and set forth.
38,176.—Combined Lever and Crank Motion.—Elias Nott, Earl Township, Pa.:
I claim the combined arrangement of the vibrating arms, D N, connected by the wires, Li L2, supported in vibrating links, MI M2, substantially in the manner set forth, in connection with the arms, C F (on arm or beam, D), for working the pump and other appliances, at one and the same time as herein specified for the purposes men-tioned.

38,177.—Bird Cage.—Charles L. Osborn, Brooklyn, N. Y. I claim, first, The d or, P, constructed and operating substantially

I claim, IFst, The d or, F, Constructed and openating concentration, as set forth. Second, The combination in a cage of base, A, portable pan, L, wire bottom, K, and tubular frames. B and C, &c. or their equiva-lents, constructed and arranged substantially as specified. 38,178.—Car Coupling.—James H. Osgood, Jr., Boston,

Maaa MASS.: I claim the link, C, provided with the prong, d, and hole, e, con-structed and operating substantially as described.

38,179.-Thrashing Machine.-Jesse Reed, Marshfield, Maga

mass.; I claim the combination of the yielding lip, E, with the revolving beater, B, and the feeding board, D, or its equivalent; the arrange-ment of the revolving beater, B, or the driving shaft thereof, the feeding board, D, and its opening, i, being as and for the purpose sub-stantially as described.

stantially as described. 38,180.—Scroll for Water_Wheels.—Timothy Rose, Cort-landville, N. Y.: I claim the movable gage piece or false side, D, to the scroll in com-bination with one or more trap or stop gates, C, as above described and for the purposes set forth.

and for the purposes set forth. 38,181.—City Railroad Car.—Jacob_Ruth.; Philadelphia, Pa.: I ciaim, first, Shields or guards of appropriate form, arranged ad-jacent to the wheels of city railroad cars, and secured to a frame resting on and supported by the axles, and independent, as regards vertical position, of the frame which supports the body of the car substantially as set forth for the purpose specified. Second, The rocking frames, N N, hung to the within described inner or independent frame, furnished with guards, h, and beveled shields, M M, the whole being arranged and operating, substantially as and for the purpose herein set forth. Third, The combination of rocking frames, N, sleeve, W, with its arms, n n n, and p P, and springs, X, or their equivalents. Fourth, The brack levers, P hung to the inner or independent frame, jointed to each other, and operating substantially as set forth.

frame, jointed to each other, and operating substantially as set forth. 38,182.—Car and Truck Connection.—Josiah J. Sherman, Albany, N. Y.: I claim, first, The employment or use of balls, E, or rubbers, F', interposed between the trucks and the car body in suitable boxes, when the said parts are constructed and combined, in the manner herein specified, so as to permit free motion of the car body laterally in either direction, and afterwards restore it automatically to its nor-mal poelition. Second, The combination of the annular springs, g, with the bear-ings, ef h 1 i, or any of them, when arranged to operate in the man-ner and for the purposes herein specified. [The object of this invent^{100 is} to diminish the, lateral; force upon

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the rails of a railroad and the wheels of a car truck caused by the lateral movement of the car, to ease the motion of the car. facilitate the required changes in the relative position of the trucks of a car in turning or passing over curves.]

38,183.—Combined Bag-holder and Elevator.—George H. Smith. Des Moines, Iowa: I claim the combination of the adjustable arms, D, and hooks, g, with the movable frame, A. rising and failing platform, C, rope, h, windlass. E, ratchet wheel, n, and pawl, o, all constructed and oper-ating in the manner and for the purpose set forth. [The principal object of this invention is to enable the laborer to

fill grain bags without assistance and to elevate the same to a conve-nient hight from the floor, so as to load them unto his shoulder without having to stoop over or require other help.]

having to stoop over or require other heip.] 38,184.—Setting for Jewelry.—Samuel J. Smith, New York City: I claim the setting composed of the two frames or plates, A B, com-bined by means of the pieces, b b, and spurs, d d, the back frame, A, being furnished with clarmys, c c, and the front one, B, with project-ing strips, e e, or their equivalents, substantially as herein set forth. [This invention consists in an open setting composed of two separ-ate plates or frames constructed and combined in a novel manner and buying a novelar rangement of clamps for securing the stones such

having a novelarrangement of clamps for securing the stones, such setting being made with a small expenditure of labor and being very strong and light, and showing the stones to great advantage, and be ing suitable for brooches, pins, rings, and other articles of jewelry

ing suitable for brooches, pins, rings, and other articles of jeweiry. 38,185.—Automatic Grain Scale,—Andrew Steveley, Fond du Lac, Wis: I claim, first, The arrangement of the chutes, E and F, 'in the hop-per substantially as and for the purposes herein apecified. Second, The arrangement of the valve, V, previded with the pin, d, or its equivalent a nd the bar, m, when used in connection with a re-volving scale and constructed and operating substantially as and for the purposes delineated and set forth. Third, I claim the employment for the purposes herein apecified of a revolving scale. M, constructed and operating substantially as here-in set forth and described.

38,186.—Furnace for smelting Ores and for other purposes.—George W. Swett, Troy, N. Y.:. I claim the construction of a furnace combined of the parts described, or their equivalents, in the manner and for the purposes above specified.

38,187.—Hydraulic Lifting Jack.—James Tangye, Bir-mingham, England. Patented_in England, Feb. 27, 1862 :

1862: I claim, first, The arrangement and combination of the parts of hy-draulic lifting jacks hereinbefore described and illustrated in Figures I, 2 and 3, of the accompanying drawing. Second, The arrangement and combination of the parts of the pumps of hydraulic lifting jacks hereinbefore described and illus-trated in Figures I, 2 and 3, of the saccompanying drawing. Third, The arrangements and combinations of the parts of the pumps of hydraulic lifting jacks by which the lowering of the said jacks is effected as hereinbefore described and illustrated in Figures 2, 4 and 5, of the accompanying drawing. 20 190 Coccl Scattle, WD Theodemell Albann N V.

38,188.—Coal Scuttle.—W. B. Treadwell, Albany, N. Y.: I claim the convexo-concave shield, B, in combination with the straps, a, and the rods, e, operating in the manner herein set forth. -Lantern.-F. G. Tucker & A. Crawford, Albany. 38,189

38,189.—Lantern.—F. G. Tucker & A. Crawford, Albany, N. Y.: We claim, first, The cells, s., with the shelf, "m, in 'cylinder, E, and the cells. t., with the shelf, n, in the cylinder, B, for the pur-poses set forth. Second, The partition, p, with the openings, J. in cylinder, B, to sheld the heat from the cap of the lantern. Third, The cylinder, D, with its ornice, k, and slot, v, arranged to slide within the cylinder, E, so as to accommodate the shalt, k, of the wheel with the cylinder, E, so as to accommodate the shalt, k, of the Fourth, The springs, e e, as arranged to secure the cylinders, D and E, to 'each other in combination with asid cylinders and with the cells, shelves and partition aforesaid. Fifth, The combination of the whole lantern as represented and set for the numbring the said cells, shelves, partition, cylinders, orlinee, and slot and springs, as applied to any of the lamps and burners now in common use, the whole to be made as represented and for the pur-poses herein set forth.

poses herein set forth.
38,190.—Machinery for making Covered Twist and Cord.
—John Turner, Norwich, Conn., and Isaac E. Palmer, Montville, Conn.:
I claim the combination, with the elongated spindles, F, and the obbins. H, and their discs, H', of the bollow spindles, G, the bobbins I, and the bobbin discs, I', the latter revolving independently of and at greater velocity than the discs. H: all in the manner and for the purpose herein shown and described.

This invention consists in the arrangement of the yarns or threads of cotton or other fibrous material which are to form the hody of covered twist and the yarns or threads of silk or other fibrous material which are to form the covering of the same on two series of bobbins or their equivalents, each of such series carried by one of two separate spindles, one of which is hollow, and which are arranged with their axes in line with each other and which rotate either at different velocities in the same direction or in different directions, by which means the several varns or threads which form the body are twisted together, and the several yarns or threads which form the covering are wound upon the body of the twist by one continu in a more simple and perfect!manner than by the means heretofore adopted for the purpose.]

adopted for the purpose.] 38,191.—Grain-dryer.—Jesse B. Wheeler, Bolton, Mass.: I claim, first, In arranging the walls for forming the dust space, I, as above described in combination with the guiding plates, J, substan-tially as berein described, and for the purpose set forth. I also claim to cumbination with the hot air chamber, E, perforated boltom, C, and the stirring and moving arms traversing over 1t, the exhaust ian, D, for drawing the heated arr up through the grain and through the machine substantially as described. I also claim in combination with the hot higed apron, K, over lying the cool air chamber, L, the raising and lowering rods, o, o, and hinged valve, s, so that sold apron may beraised or adjusted, without opening the chamber, L, substantially as described. I also claim as a stirring and moving mechanism or device, the arms, b, hinged, made signable and moved by endiess chains, sub-stantially as herein described and represented. 88, 192.—Clew Thimble — Williom W Wilcor Middletown

38,192 .- Clew Thimble .- William W. Wilcox, Middletown,

Conn.: I claim the application to a clew thimble. B, of a guard, a, con-structed and operating in the manner and for the purposes substan-tially as shown and desbribed.

[This invention consists in the application to the clew thimble of a

guard cast with the same out of one piece, or otherwise secured to be same in such a manner that the rope passing over said thimble is protected against the chafing motion of the clew-line block, and no further protection to the rope is needed to save it against injury from that cause.]

38,193.—Direct-acting Engine.—Louis Winterbauer, New York City: I claim, first, So combining the secondary cylinder, C', with the silde valve, D, tappet, m, gnd cam, F, that by the motion of the sec-ondary cylinder at the end of each stroke, the tappet, m, is carried back to its central position ready to be acted upon by the cam, F, sub-stantially in the manner and for the purpose shown and described. Second, The exhaust port, e, of the secondary cylinder in combina-tion with the exhaust port, c, of the main cylinder substantially as de-scribed when so arranged that the secondary cylinder exhausts through the same port with the main cylinder.

38,194.—Grate.—Charles J. Woolson, Cleveland, Ohio

tions, A and B, with the opening, C, beneath the grate, G, the define ting plate, B', and opening or openings, E, substantially as and for the purpose herein set forth. 38,195

18,195.—Loom.—Wm. Breitenstein (assignor to M. Fischel & Co.), New York City: I daim operating and controlling the operation of a divided take-up by jacquard mechanism, so that the action of the several sections of the take-up shall be determined thereby, for the purpose herein set

110. Stereoscopic Instrument.—Ernst G. Chormann, Philadelphia, Pa.: olaim, first, The frame, C, having lenses adjustable in the man-r described, or any equivalent to the same, and the casing, B, in mbination with the box, A, or its equivalent, the whole being con-ucted and arranged substantially as and for the purpose herein set th.

forth. Second, The arms E and E', with their rings and lenses, when hung to the frame, C, and arranged for ready adjustment, and for folding together substantially as set forth for the purpose specified. Third, The spring, a, when combined with the box, A, casing, B, and frame, C, as set forth.

38,197.—Stereoscopic Instrument.—Ernst G. Chormann, Philadelphia, Pa.:

30,191.—Stereoscopic Instrument.—Ernst G. Chormann, Philadelphia, Pa.: I claim the trame, B, with its elastic legs, d and d', or their equiva-lents, and arms, E and E', carrying appropriate lenses, in combina tion with the case, A, of any suitable material, the whole being con-structed and ar ranged substantially as and for the purpose herein set forth.

38,198.—Mode of producing Designs on Textile Fabrics, &c.—Edward Leitenberger, Reichstadt, Bohemia, as-signor to Augustus G. Scheller, New York City:

• I claim, first, Imparting to the material to be printed a lateral vibrating motion during the operation of printing substantially as and for the purpose specified. Second, The combination with the printing roller, C, and pressing roller, B, of the laterally vibrating roller, I, constructed and operating substantially as and for the purpose shown and described. Third, The arrangement of the angular levers, G, and weighted cylinder, H, in combination with the gudgeons of the let-off roller, F, of a printing machine constructed and operating substantially as and for the purpose shown and described.

38,199. -Coal-oil Lantern.--P. J. Clark (assignor to S. S.

33,199.-COal-Oil LARTEIN.-F. J. CIRK (Assignor to S. S. Clark, West Meriden, Conn.: I claim the peculiar construction and arrangement, herein shown and described, of the jacket, H, in combination with the lamp, E, and burner, G; so that while the lower part of the air duct is open and free, the upper part or space, d, will be narrow and thus com-prese the air into a thin sheet, and cause it to shoot with increased velocity into the interior of the burner, all as set forth.

[This invention relates to a lantern for burning coal oil without the aid of a draught chimney, and has for its object the supplying of the fame of the lamp with a requisite amount of air to support proper combustion for illuminating purposes, and at the same time admitting the oil into the lantern in such a manner that the flame will not be extinguished by an up-and-down or, swinging movement of the lan tern.l

200.—Printing Machine.—William Bullock (assignor to himself, Calvin Adams & G. S. Selden), Pittsburgh, 38.200

himself, Calvin Auams a construction Pa.: I claim, first, The feeding of the paper into the printing machine from a continuous roll or web, by means of a feed roller revolving in contact with the paper roll, which rests against it. Becond, Hanging the shaft of the spool, or axis of the roll of paper, In bearings at one extremity (1.1 wo wrms, which are fightly attached a their other extremity (1.1 wo wrms, which are fightly attached a their other extremity (1.1 wo wrms, which are fightly attached a their other extremity (1.1 wo wrms, which are fightly attached a their other extremity (1.1 wo wrms, which are fightly attached a their other extremity (1.1 wo wrms, which are fightly attached a their other extremity (1.1 wo wrms, which are to the an accu-rately horizontal position, at right angles to the path of the paper through the machine.

The bearings at one existence of the spool, or axis of the fould paper in bearings at one existence of the work, which are fightly statched a their other extremity (in 4 shall, which is left free to tar on its axis in a fixed bearing, whereby the roll of paper is kept in an accu-rately horizontal posluon, at right angles to the path of the paper through the machine. Third, Placing the bearings of the arms which carry the spool of paper below bait not directly under the feed roller, so that being slightly inclined toward the feed roller, the roll of paper will press with a portion only of its wright thereon, in order that the angle of inclination may be gradually increased by the diminution in size of the roll of paper as it is unwould from the spool, and thus, although its wright is continually decreasing, the relative degree of pressure upon the feed roller may be correspondingly increased, and thereby an unform actual pressure be maintained. Fourth The use of a counterpoise, so connected with the shaft and arms which carry the spool of paper, as that, by adjusting the cou-terpoise, the degree of pressure on the feed roller. Fifth, Combining in one the feed roller of the roll of paper can be so regulated as to couse the paper to unwind on to the feed roller, without the roll of paper on the spool becoming losened, as it would do were the whole or too great a proportion of the weight of a large roll of paper as the feed roller, and thereby causing it to carry the sheats of paper, on the feed roller, and thereby causing it to carry the sheats of paper, directly to the first impression cylinder, substantially as described.

Sixh, The use of grippers, or other equivalent device for seizing the sheets of paper directly to the first impression cylinder, substantially is a described. Seventh, Transferring the sheets of paper from a teed roller, moving at a bigherapeed, to the impression cylinder, or that device which catries the sheets forward from the cutters to the type cylinder, moving at a bigherapeed, to the impression cylinder, or that device which catries the sheets forward from the cutters to the type cylinder, moving at a bigherapeed, by meanse of a pair of gippers on the feed roller and on the impression cylinder, which out the two of tapes, or other existing of paper as thry pass through the machine, without checking or intermiting the feed. Eighth. The use of a set of grippers on one of the cutting cylinders, the who are opened and chosed by a tationary can, or other equivalent device, by means of which such dusting cylinder size performs the whore are opened and chosed by a tationary can, or other equivalent device, by means of which such dusting cylinder size performs the work uit a 'layeron,'' acling the End of the paper below of a set of such cutting cylinder size of such cutting cylinder size cylinder. Which latter takes the state cutting cylinder size of such cutting cylinder severing the paper when a sheet of sufficient length the descent of a serrated cutter. for the purpose of holding the paper firming against the edges of the slot in the female cutting cylinder. Mile the dust is severed, a ster outing cylinder immediately after the sheet which had its been severed therefrom, toward the opposite cutting cylinder immediately after the sheet which had its been severed thereform, toward the opposite cutting cylinder; or being cutting cylinder a dth first impression cylinder; so that such scrap will fail away, when severed from the web, by at its cutter, so that such secrap will fail away, when severed from the web will be assored between the cutting cylinder immediately from the first impression cylinder; so that suc

preventaily dust or scraps of ps per from falling on the type or inking organisms. Thirteenth, The delivering apparatus, consisting of short fly-rods, having a rapid strokein a small are up and down, so as to strike the rear end of the printed sheets as they pass from the machine; in com-bination with the curved fingers, for holding therear end of the sheets during the up-stroke of the fly-rods and until their down-strokes, and of a roller to receive the stroke of the fly-rods and the pressure of the equivalent device, by which the paper is arcside at its rear end on its passage from the machine, whereby a ver¥ rapid delivery of the sheets is effected. Fourteenth, The use of a delivering table for the reception of the printed sheets, beneath and in the rear of the delivery of the printed heets, until a certain number, say fifty or one hundred, have been

deposited upon it, when it suddenly moves an inch or two to one side, and is sgain stationary, until an equal number of sheetsare delivered, when it moves back again; and so on, alternating from side to side, for the purpose of counting and separating the sheets into files of any required number; substantially in the manner hereinbefore de-soluted.

oribed. Fifteenth, Communicating an alternating lateral movement to the mail ink-distributing rollers, on the face of the large ink-distributing ylinder, by giving a simultaneous reciprocating motion to one end i their bearings, for the purpose of securing a more perfect and niform distribution of the ink.

38,201.-Manufacture of Gun Barrels.-R. A. Douglas, Orange, N. J., assignor to Edward Robinson, New York City.

18,201.—Manui accur. Orange, N. J., assignor to Europe York City: I claim the method, herein described, of making gun barrels, by frawing the same from a cylinder of malleableiron previously drilled, substantially as herein set forth. Description of the part of the same from the sa

substantially as herein set forth. 38,202.—Bedstead.—David Manuel (assignor to himself and John M. Kelly), Lancaster, Pa.: I claim, first, The conleally-colled spring, D, for the support of the bearing, R, with its additional spring-rod and hinge, G, shouldered for the loops or bracelets, f, on the slats, F, in combination with the supporting and wedging cross-bare, B, and boxes, C, all arranged and applied in the manner and for the purpose specified. Second, The slotted and tongue do bd-rail fratemers, H K, construc-ted, operated and applied substantially in the manner specified.

38,203

103.—Strike for Door Latches.—James E. Terry, Phil-adelphia, Pa., assignor to The Russel & Erwin Man-ufacturing Company, New York City : claim a strike provided with two latch openinge, b, side by side, nelined projection, f, and a central partition plate, c, all arranged stantially as and for the purpose herein set forth.

[The object of this invention is to obtain a strike for door locks which will be capable of being applied, without being inverted or reversed in position, to the frame of either a right or left hand door. The invention is designed to be used with what is generally known as a carpenter's lock, or that which has a laten or rising and falling bolt.]

38,204.—Revolving Fire-arm.—Frank P. Slocum (assignor to Samuel B. Slocum), Brooklyn, N. Y.: I claim, first, The construction of a revolving fire-arm with inde-pendent. longitudinally movable chambers, in combination with open-ings in the sides of the cylinder of sufficient size to permit the lateral insertion of metallic cartridges, without removing the chambers en-itrely from the cylinder. Second, The stationary piston, applied in combination with the re-volving cylinder and its independently movable chambers, substan-tially as and for the purpose herein described.

taily as and for the purpose herein described.
 38,205.—Shade Rack.—William Webster, Morrisania, N. Y., assignor to Charles Goodyear, Jun., New York City:
 Iclaim, lirst. The employment and use of an elastic or flexible roller in racks, whostantially as herein set forth and described.
 Second, The-employment and use of an adjustable spring in racks, substantially as herein set forth and described.

82,206.—Defensive Armor for Ships and other Batteries.— Charles W. S. Heaton, Belleville, III.: I claim the employment of wood, or its equivalent, when used in a manner and for the purpose substantially as described. 38,206

RE-ISSUES. 1,451.—Cartridge Box.—Augustus A. Bennett, Cincinnati, Ohio. Patented Jan. 27, 1863 : I claim, as a new and useful article of manufacture, the cart-ridge box, A B, whose cover is made self-closing by means of one or more metallic springs, constructed, adapted and operating substan-tiality as described tially as describ

tially as described. 1,452.—Wood-saw Frames.—William H. Livingsten, New York City. Patented Sept. 18, 1860 : I claim, first. The brace. E, ap plied to the frame of a hand saw be-tween the cross-plece and the e d piece of said frame, in the manner and for the purposes substantially as specified. Second, The combination of the brace rod, E, and metai plate, D, arranged or applied to the saw frame, substantially as and for the purpose set forth.

purpose set forta.
1,453.—Manufacture of Metallic Zino.—Alfred Monnier, Philadelphia, Pa. Patented May 18, 1858 : I claim the process of obtaining metallic Zinc by the combination of the two metallur gicoperations substantially as herein specified.
[This improvement consists in obtaining metallic zinc by a combina-

tion of two metallurgic operations, viz: first, separating the oxides of sinc from the rest of theore, by applying to theore in a suitable fur-nace a degree of heat such as would separate the oxyd of zinc, or a large portion of it, by volatilization, from the gangue or other metals contained in the ore, or by treating the ore with heat in connection with line, or other flux, the more effectually to remove the gangue and other metals from the oxide of zinc, and, second, treating the oxide of zinc, so obtained, by heat and carbon in a suitable retort or muffle and thereby obtaining therefrom metallic zinc.]

1.454. -Skate.--Willis L. Gregory and G. Landon

1,454.—Skate.—Willis L. Gregory and G. Landon. Jun., of Amsterdam, N. Y., assignees of said Willis L. Gregory. Patented March 4, 1862 : I claim, first, a detached washer or socketed plate which has a ver-tical and a longitudinal channel formed h it, the two channels inter-secting one snuther, the said washer plate answering as an aufiliary to a state-runner fastening, i. e., a detached serew, substantially as and for the purpose set forth. Becond, interposing between the wooden stock and the metal run-ner, a detachable longitudinally-grooved and vertically-perforated washer or socketed plate, in such manner that it braces the wooden stock, gives side bearings to the runner and also enables the runner to have end bearings, substantially in the manner set forth. Third, The combination of the longitudinally-slotted and vertically-perforated washer or socketed plate, D, with a detachable 'wood' Fourth, the combination of sholders or standards of a skate run-ner, and a detachable longitudinally-slotted and vertically-perforated washer or socketed plate, substantially as described. Fourth, the combination of the bulders or standards of a skate run-ner, and a detachable longitudinally-slotted and vertically-perforated washer or socketed plate, substantially as described. Fourth, A detachable longitudinally as and for the purpose set forth.

Washer or socketeu place, successfring, as and the purpose set forth. Fifth, A detachable screw as a part of a skate runner fastening, with two sides of its head made parallel and flush with the sides of the runner below the washer or socketed plate, in the manner herein de-scribed far the purpose set forth. Sixth. The combination of the drive-tail notch in the upper edge of the skate, the loosescrew fastening and a longitudinally-grooved and vertically-perforated washer, subfantially as and for the purpose set forth.

forth. Seventh, The combination of the recesses in the skatestock, a metal socket plate with a longitudinal groove and a vertical perforation and a screw fastening, substantially as and for the purpose set forth. Eighth, The combination of the screw or screws, notch or noiches for the heads of the screw or screws, longitudinally-grooved washer or washers and the nut or other equivaleut fastening or fastenings as a means of uniting the stock and runner of a skate, substantially as descuined.

DESIGN. 1,476.—Stove Plate.—James L. Collins, Chicago, Ill.

EXTENSIONS. Tool for attaching Tubes to Boilers.—Thomas Prosser, New York City. Patented April 17, 1849: I claim the combination of the guide ring, having mortises therein, w th the segmental erpanders and conical or paramidical mandrel; ostructed and opersting substantially as hereindescribed. Secondy, I claim as separate and component parts of the same, the double projections on the segments, having a hollow between them to be placet opposite to the tube sheet while the tubeis beingerpand-ed within it.

tion of the mortise guide ring itself, which may be placed inside the tube, if required.

tube, if required. State Spike.—Samuel Crocker, Taunton, Mass. Patented April 17, 1849. Re-issued August 1st, 1854; again re-issued February 24, 1863: I claim the new article of manufacture hereinabove described. viz.: a yeliow-metal nail or spike made by the combined processes of heat-ing the metal to redness, and in such state cutting and heading it in a nail machine, and subsequently treating it substantially as described; meaning by the term. 'yellow-metal.'' a metal combosed of copper and give in the proportion in which they are usually combined in the manufacture of the well-known "Muntz sheathing metal."

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On filing each Caveat	1 0
On filing each application for a Patent, except for a design On issuing each original Patent	15
On appeal to Commissioner of Patents	20
On application for Re-issue.	150
On granting the Extension	i 50
On granting the Extension	50 10

On filing application for Design, three and a halfyears\$10 On filing application for Design, seven years\$15 On filing application for design, fourteen years\$30
he law abolishes discrimination in fees required of foreigners.

The law abolishes discrimination in fees required of foreigners, excepting natives of such countries as discriminate against citizens of the United States-thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners except the Canadians, to enjoy all the privilezes of our patent system (but in cases of de-signs) on the above terms. Foreigners cannot secure their in ventions by filing a caveat; to citizens only is this privilege accorded. During the last seventeen years, the business of procuring Patents

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as desiring to file a caveat can have the papers prepared in the Per The Government fee for a caveat, under the new law, is \$10. A pam-phlet of advice regarding applications for patents and caveats, printed in English and German, 18 furnished gratis on application by mail. Address MUNN & CO., No. 37 Park Row, New York.

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Circulars of information concerning the proper course to be pur sued in obtaining patents in foreign countries through our Agency, therequirements of different Government Patent Offices, &c., may d gratis upon application at our principal office. No. 37 Park w York, or any of our branch of Row. Ne es.



A., of N. Y .- No dependance for accuracy can be placed upon the common reports which have been published re-specting the difficulties of cutting a canal at Vicksburgh. It would therefore be out of place for us to discuss any question of engineer ing based upon such reports.

- H.S., of Pa.-There is no formula by which an inventor can regulate the sale of rights under his patent so as to secure equa and exact justice to all purchases. We can suggest no first rule on this point. We think as a general rule that purchasers get the on this point. We the est of the bargain.
- A. H., of N. Y.-If Mr. Miller's patent was granted in 1855 it will not expire until 1869. Patents issued in 1855weregranted for fourteen years.

E. M., of Mo.-Your method of bleaching wax, so far as we know, is new and patentable. There are no establishments in this vicinity, with which we are acquainted, where wax is bleached as a special part of the business.

- T. H. M., of Pa.-Alcohol is a solvent of castor oil and with it forms a clear solution, but with olive oil it forms a milky so-lution. The alcoholic castor oil solution, colored with alkanet root, forms a tricopherous for the hair.
- S. N., of Ill.-A correspondent whose letter is published on page 182, Vol. VI. (new series) of the SCIENTIFIC AMERICAN states that the nitro-muriate of platinum is employed to form s dead black on brass, such as the eye pieces of telescopes.

A. B., of Mass.-Any good treatise on photography will give you information respecting the strength of solutions for de veloping the impressions.

S. C. C., Jr., of Mass. and J. A. M., of Pa.-Your commuleations on aerostation have been received.

- S. B. L., of R. I.-Corliss & Co., of Providence, R. I., will no doubt construct an air whistle for you, of the size you desire, to be ated with an air pump.
- W. H. F., of Iowa.-We recommend you to get a good millwright to select the engine and boiler for your grist mill respectable engineering establishment will build you a bollerand gine of the best quality, if a sufficient sum is paid for them
- H. W., of Pa.-The cement for stopping sand-holes in iron castings is made by mixing one part of flowers of sulphur and two parts of sal-ammoniac with eighty parts of coarsely-powdered iron tarnings. Sufficient water is used to make this compound into a hick paste; it is used as soon as it is made, and the holes ar plugged tight with it. This cement ultimately becomes as hard as the metal itself.

T. V., of N. Y.-Gumboge (commonly called gamboge) is a yellow gum sold by all dealers in artists' materials. It is employed as a water olor in painting, and for coloring lacquers or varpiales made of shellac.

Money Received

At the Scientific American Office, on account of Patent Office business, from Wednesday, April 15, to Wednesday, April 22, 1863

J. F. R., of N. Y., \$45; R. K., of Mass., \$45; L. R., of N. Y., \$20; J. P. H., of D. C., \$20; H. F. of Ohio, \$45; F. C. P., of N. Y., \$16; N. P. O., of N. Y., \$20; D. H., of N. Y., \$20; J. B. R., of N. Y., \$20; D. N. D., of N. J., \$46; W. L. R., of Mass., \$16; J. I., of Ohio, \$25;
 H. S., of Pa., \$12; A. M. B., of Mich., \$16; A. W. S., of Mass., \$25;
 M. M. & Co., of Ind., \$16; N. S., of Ind., \$25; J. J. R., of Vi., \$16;
 A. C., of Pa., \$15; J. De R., of Ohio, \$16; G. N. D., of Ky., \$25; W. H., of Iowa, \$16; W. & T., of Mass., \$25; T. S. D., of N. J., \$260; W. & C., of N. H., \$28; G. W. D., of N. Y., \$25; J. F. J. G., of N.Y., \$25; W. W., of Mich., \$20; J. McK., of N. Y., \$31; J. P. T., of N.Y., \$61; W. J. S., of Ohio, \$20; J. T., of N.Y., \$20; G. A. D. of Cal., \$20; F. W. G., of N.Y., \$20; G. & V., of N.Y., \$45; W. G. C., of N.Y., \$59; J. W. D., of Conn., \$20; A. F. W., of N.Y., \$25; C. C. B., of III., \$25; C. & T., of Conn., \$25; J. S. C., of Mich., \$15; R. H., of N. Y., \$16; N. E. S., of Ind., \$25; E. R. S., of Mich., \$10; G. W. H., of N.Y., \$153; P. K., of Conn., \$20; G. C. R., of N.Y., \$20; M. P. L., of Maine, \$45; D. B. H., of N.Y., \$20; J. F. H., of N.Y., \$16; B. F. B., of N.Y., \$20; C. F. T., of N. Y., \$16; N. A. B., of N.Y., \$45; H. B. J., of N.J., \$20; C. L. A., of N. Y., \$10; A. & W., of N. Y., \$12; T. E., of R. I., \$25; J. M., of Ky., \$25; M. & H., of Ill., \$25; G. W. G., of Ill., \$25; D. R., of N. Y., \$16; N. Z. P., of Ill., \$25; W. J. S., of Ohio, \$25; D. K., of N. Y., \$16; N. Z. P., of Ill., \$25; W. J. S., of Ohio, \$25; A. & H., of Mass., \$58; S. & F., of R. I., \$30; G. H., of N. Y., \$15; G. E. H., of N. Y., \$25; S. W. D., of N. Y., \$10; P. & B., of Mass., \$25; H. & S., of PA., \$25; T. O., of Mass., \$21; A. H., of Iowa, \$26; B. K., of Mo., \$15; J. G., of Ill., \$25; W. S. P., of Mich., \$250; W. F. R., of N. Y., \$16; D. R., of R. I., \$1 M., of N. Y., \$25. , \$16; G. B. F., of Ill., \$30; T. W., of Mass., \$17; W

Persons having remitted money to this office will please to examine the above list to see that their initials appear in it, and if they have not received an acknowledgment by mail, and their initials are not to be found in this ist, they will be as n_{0} tiff us immediately, and inform us the amount, and how it was sent, whether by mail or ex

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